



**The AV expressing NEU1 induces a stable increase of NEU1 activity in the mouse liver tissues.** (A-B) 4 month-old C57Bl6 male mice were injected into the tail vein with NEU1-GFP adenovirus (NEU1-GFP AV) or GFP control adenovirus (GFP AV) at  $4.8 \cdot 10^8$  pi/mouse, exposed to HFD and sacrificed after 1, 5 or 9 weeks. NEU1 activity was measured (A) in different organ homogenates 4 weeks after AV injection and (B) in liver homogenates 1, 5 and 9 weeks after AV injection, as described in the legend to supplementary Figure 1. Data are shown as means  $\pm$  s.e.m of 4 mice and analyzed using *t*-test. Significant (\* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ ) difference was detected with GFP AV group.